

REMARKS

By the above actions, claims 1, 4, 6, 7, 11 and 12 have been amended. In view of these actions and the following remarks, further consideration of this application is now requested.

With regard to the objections to the claims, each of the items noted by the Examiner have been corrected by the above amendments. Thus, withdrawal of the objection to the claims is in order and is now requested.

All of the claims have been rejected based upon the '160 patent to Trumbull, either alone under § 102 or in combination with the patent to Sugawara et al. under § 103. These rejections should be withdrawn for the following reasons.

Regarding the cited Trumbull '160 patent, a motion picture system is disclosed having two separated light sources (66, 68) wherein their respectively emitted partial cones of light have optical axes arranged at an included angle of roughly 20°. Both partial cones of light convert to a common point located between an image projection plane (18F) and an exit surface of an objective lens (20).

However, one main difference between this prior art illumination device and the device according to the present application is that, according to the prior art, the main cone of light is not formed from said both light sources about a common envelope line of both partial cones of light (compare Fig. 2 of the present application with Fig. 6 of Trumbull where a gap is shown between light bundles 72, 74 upstream of the image projection plane and that is comparable to the gap shown for the Fig. 1 prior art of the present application, but which does not exist with the present invention. Thus, the conventional system does not take into account the conformity of the illumination projected on an image projection area.

Please note that an important element of the present invention is that the partial cones of the light which are formed by the useful reflected light are so close to one another that their path through the image projection plane (through which the image carrier passes) forms a common (main) cone of light and also penetrate the objective lens as a cone of light. Furthermore, the arrangement of the both light sources according to the present application is designed to achieve a small-size projection lamp. Claims 1 and 7 of the present application have been amended above to make it clear that a common envelope line (see line 14 of the present application) is one along which the two cones merge such that at least one ray from each of the two cones have a coincident optical path "from" the first and second light sources. Such does not occur with the Trumbull '160 device which is designed for each lamp to

illuminate a respective half of a film image and the cones of light do not merge until near the image projection plane with only nominal overlap, as contrasted with the substantial overlap shown as being achieved by the present invention in Figs. 3A, and 3B of the present application where the cones of light are merged as they leave the merged reflectors of the light sources.

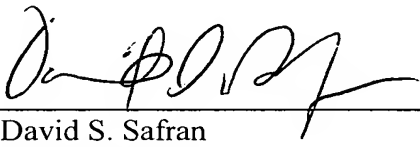
Regarding the cited prior art according to the Sugawara et al. patent, as noted previously, the illumination device of the Sugawara et al. patent shares certain attributes with the present invention, it departs from the present invention in that there is no image projection plane comparable to applicants' image projection plane 3 (location of object the image of which is to be projected) that is located in front of the objective lens 5, in that Sugawara et al. is lamps are not used to project an image of anything but rather are used to illuminate the RGB image modulating portions 8R, 8G, 8B of a liquid crystal display, the colors from which are combined in a prism 9 for enlargement and projection via projection (objective) lens 10 onto a screen such action there is no need for applicants' merging effect and and in fact, as can be seen in Fig. 3B of Sugawara et al., the cone of light from the projection lamp is converted into parallel light by the lenses located between the lamp and the polarizing element 5, prior to the light being reflected by mirrors onto the RGB image modulating portions 8R, 8G, 8B of the liquid crystal display. Thus, Sugawara et al. cannot teach a modification of the manner in which the light cones are projected in Trumbull '160 so as to lead to the present invention since the merging of different color lights in Sugawara et al. has no applicability to the illumination of separate film segments of Trumbull '160.

Moreover, since the reflector and lamp arrangement of Sugawara et al. is for a different purpose in a different type of device, it is submitted that there is no reason why one of ordinary skill in the art would think to replace the reflector of Trumbull '160 with that of the Sugawara et al. patent.

In view of the foregoing comments, it should now be apparent to the Examiner that the present invention is directed to subject matter that is significantly different than anything disclosed or even suggested by the Trumbull '160 patent whether viewed together with Sugawara et al. patent or not. As a result, continued rejection of the claims of this application on the basis of the Trumbull '160 patent, by itself or in combination with Sugawara et al. patent is unsupportable and the outstanding rejections based thereon should be withdrawn, such action being hereby requested.

Lastly, it is noted that a separate Extension of Time Petition accompanies this response along with a check in payment of the requisite extension of time fee. However, should that petition become separated from this Amendment, then this Amendment should be construed as containing such a petition. Likewise, any overage or shortage in the required payment should be applied to Deposit Account No. 19-2380 (742116-2).

Respectfully submitted,

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